

U. S. PLANT PATENT APPLICATION OF

MARK A. SMITH

FOR: CHRYSANTHEMUM PLANT NAMED

‘SUNNY YOGRETCHEN’

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TITLE: CHrysanthemum PLANT NAMED ‘SUNNY YOGRETCHEN’

APPLICANT: MARK A. SMITH

BOTANICAL CLASSIFICATION/CULTIVAR DESIGNATION:

5 *Chrysanthemum X morifolium* cultivar Sunny Yogretchen

BACKGROUND OF THE INVENTION

The present invention relates to a new and distinct cultivar of Chrysanthemum plant, botanically known as *Chrysanthemum X morifolium*, commercially known as a garden-type Chrysanthemum and hereinafter referred to by the name ‘Sunny Yogretchen’.

The new cultivar is a product of a planned breeding program conducted by the Inventor in Alva, Florida. The objective of the breeding program is to create new garden-type Chrysanthemum cultivars having inflorescences with desirable inflorescence forms, attractive floret colors and good garden performance.

The new Chrysanthemum is a naturally-occurring whole plant mutation of the *Chrysanthemum X morifolium* cultivar Yogretchen, disclosed in U.S. Plant Patent number 13,672. The new Chrysanthemum was discovered and selected by the Inventor as a single flowering plant

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from within a population of plants of the cultivar Yogretchen in a controlled environment in Alva, Florida in April, 2002. The selection of this plant was based on its desirable inflorescence form, attractive ray floret color and good garden performance.

5 Asexual reproduction of the new cultivar by terminal vegetative cuttings taken in a controlled environment in Alva, Florida since June, 2002, has shown that the unique features of this new Chrysanthemum are stable and reproduced true to type in successive generations.

SUMMARY OF THE INVENTION

10 The cultivar Sunny Yogretchen has not been observed under all possible environmental conditions. The phenotype may vary somewhat with variations in environment such as temperature, daylength and light intensity, without, however, any variance in genotype.

15 The following traits have been repeatedly observed and are determined to be the unique characteristics of 'Sunny Yogretchen'. These characteristics in combination distinguish 'Sunny Yogretchen' as a new and distinct cultivar:

1. Upright and outwardly spreading plant habit.
2. Freely branching habit; dense and full plants.
- 20 3. Uniform and freely flowering habit.

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4. Decorative-type inflorescences with elongated oblong-shaped ray florets.
5. Golden bronze-colored ray florets.
6. Natural season flowering in mid September in the Northern Hemisphere.

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In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the parent, the cultivar Yogretchen, primarily in ray floret coloration as plants of the cultivar Yogretchen had orange-colored ray florets. In addition, plants of the new Chrysanthemum were smaller than plants of the cultivar Yogretchen.

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Plants of the new Chrysanthemum can be compared to plants of the Chrysanthemum cultivar Golden Yomarilyn, disclosed in U.S. Plant Patent number 13,018. In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Golden Yomarilyn primarily in ray floret coloration as plants of the cultivar Golden Yomarilyn had lighter yellow-colored ray florets.

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Plants of the new Chrysanthemum can also be compared to plants of the Chrysanthemum cultivar Gold Crest, disclosed in U.S. Plant Patent number 11,606. In side-by-side comparisons conducted in Alva, Florida, plants of the new Chrysanthemum differed from plants of the cultivar Gold Crest in the following characteristics:

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1. Plants of the new Chrysanthemum flowered more uniformly than plants of the cultivar Gold Crest.
2. Plants of the new Chrysanthemum had smaller inflorescences than plants of the cultivar Gold Crest.
- 5 3. Plants of the new Chrysanthemum had darker yellow-colored ray florets than plants of the cultivar Gold Crest.

BRIEF DESCRIPTION OF THE PHOTOGRAPHS

The accompanying photographs illustrate the overall appearance of the new Chrysanthemum. These photographs show the colors as true as it is reasonably possible to obtain in colored reproductions of this type. Colors in the photographs may differ slightly from the color values cited in the detailed botanical description which accurately describe the colors of the new Chrysanthemum.

15 The photograph on the first sheet comprises a side perspective view of a typical flowering plant of 'Sunny Yogretchen' grown in a container. The photograph on the second sheet comprises a close-up view of typical inflorescences of the cultivar 'Sunny Yogretchen'.

DETAILED BOTANICAL DESCRIPTION

In the following description, color references are made to the Royal
20 Horticultural Society Colour Chart, 1995 Edition, except where general terms of ordinary dictionary significance are used. The following

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observations and measurements describe plants grown in Alva, Florida during the winter in a fiberglass-covered greenhouse under conditions and practices which approximate those generally used in commercial garden-type Chrysanthemum production. One cutting was planted in a 15.25-cm container in early December, 2002. Plants were pinched one time, that is, the terminal apex was removed to enhance branching, at the end of December. One week after the pinch, plants were exposed to short day/long night photoperiodic treatments until flowering. During the production of the plants, day temperatures averaged 26°C and night averaged 18°C. Measurements and numerical values represent averages for typical flowering plants.

BOTANICAL CLASSIFICATION:

Chrysanthemum X morifolium cultivar Sunny Yogretchen.

COMMERCIAL CLASSIFICATION:

15 Decorative-type garden Chrysanthemum.

PARENTAGE:

Naturally-occurring whole plant mutation of the *Chrysanthemum X morifolium* cultivar Yogretchen, disclosed in U.S. Plant Patent number 13,672.

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PROPAGATION:

Type: Terminal vegetative cuttings.

Time to initiate roots: About four days at 21°C.

Time to produce a rooted cutting: About ten to twelve days at
5 21°C.

Root description: Fine, fibrous; white in color.

Rooting habit: Freely branching.

PLANT DESCRIPTION:

Plant form/growth habit: Perennial herbaceous decorative-type
10 garden Chrysanthemum. Inverted triangle with mounded crown.

Stems initially upright, then outwardly spreading. Freely branching
with about eight lateral branches per plant. Moderately vigorous.

Plant height: About 21 cm.

Plant diameter: About 28 cm.

15 Lateral branches:

Length: About 17.5 cm.

Diameter: About 3 mm.

Internode length: About 7 mm.

Aspect: Upright and outwardly spreading.

20 Texture: Pubescent.

Color: Close to 146A.

Foliage description:

Leaf arrangement: Alternate.

Length: About 4.8 cm.

Width: About 3.75 cm.

5 Apex: Mucronate.

Base: Attenuate with truncate tendencies.

Margin: Palmately lobed, sinuses divergent.

Texture, upper surface: Slightly pubescent.

Texture, lower surface: Pubescent; veins prominent.

10 Color:

Developing and fully expanded foliage, upper
surface: 147A.

Developing and fully expanded foliage, lower
surface: 147B.

15 Venation, upper surface: 147A.

Venation, lower surface: 147B.

Petiole length: About 1.4 cm.

Petiole diameter: About 2 mm.

Petiole color, upper surface: 147B.

20 Petiole color, lower surface: 147C.

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INFLORESCENCE DESCRIPTION:

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Appearance: Decorative-type inflorescence form with elongated oblong-shaped ray florets. Inflorescences borne on terminals above foliage, arising from leaf axils. Disc and ray florets developing acropetally on a capitulum. About 18 inflorescences per lateral branch.

Flowering response: Under natural season conditions, plants flower in mid September in the Northern Hemisphere.

Inflorescence bud (before showing color):

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Height: About 3 mm.

Diameter: About 4 mm.

Shape: Oblate.

Color (lower surface of phyllaries): Close to 146A.

Inflorescence size:

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Diameter: About 3.7 cm.

Depth (height): About 8 mm.

Disc diameter: About 2.5 mm.

Receptacle diameter: About 4 mm.

Ray florets:

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Shape: Elongated oblong.

Length: About 1.7 cm.

- Corolla tube length: About 1.5 mm.
- Width: About 3.5 mm.
- Apex: Acute or emarginate.
- Margin: Fused.
- 5 Texture: Smooth, glabrous; satiny.
- Surface: Concave.
- Orientation: Initially upright, then perpendicular to vertical.
- Number of ray florets per inflorescence: About 96 in numerous whorls.
- 10 Color:
- When opening and fully opened, upper surface:
Close to 12A to 15A.
- When opening and fully opened, lower surface:
Close to 12B to 15B.
- 15 Disc florets:
- Shape: Tubular; apex dentate, five-pointed.
- Length: About 5 mm.
- Width, apex: About 1.5 mm.
- Width, base: About 1 mm.
- 20 Number of disc florets per inflorescence: About 25.

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Color:

Immature: Close to 154A.

Mature:

Apex: Close to 9A.

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Mid-section: Close to 144B.

Base: Close to 155D.

Phyllaries:

Quantity per inflorescence: About 20.

Length: About 5 mm.

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Width: About 2 mm.

Shape: Lanceolate.

Apex: Acute.

Base: Truncate.

Margin: Entire.

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Texture, upper surface: Smooth, waxy.

Texture, lower surface: Pubescent.

Color, upper and lower surfaces: Close to 146A.

Peduncle:

Length:

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First peduncle: About 2.75 cm.

Fourth peduncle: About 4.9 cm.

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7 Seventh peduncle: About 6.9 cm.

Diameter: About 1.5 mm.

Strength: Strong.

Aspect: About 45° from vertical.

5 Texture: Pubescent.

Color: Close to 146A.

Reproductive organs:

Androecium: Present on disc florets only.

Anther color: 9A.

10 Pollen: None observed.

Gynoecium: Present on both ray and disc florets.

Seed/fruit: Seed and fruit production has not been observed.

DISEASE/PEST RESISTANCE:

15 Plants of the new Chrysanthemum have not been shown to be
resistant to pathogens and pests common to Chrysanthemums.

GARDEN PERFORMANCE:

Plants of the new Chrysanthemum have been observed to be
tolerant to rain, wind and temperatures ranging from 0 to more than
38°C.